

## Ultra Electronics

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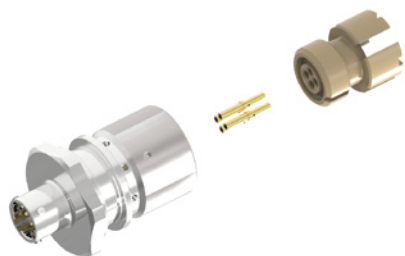
### Precision Air & Land Systems. High pressure electrical feedthrough.

Ultra Electronics Precision Air & Land Systems supplies innovative solutions to meet the environmental and operational requirements of the aerospace and defence industries. Ultra asked Martec to design a prototype connection assembly for a new weapon ejection system.

#### Martec expertise:

- Custom design
- Harsh/hostile environment
- Match existing interface
- Non-destructive testing
- Pressure testing
- Design team support
- Advanced production and sealing





## MANUFACTURING CHALLENGES

Martec was asked to create a high pressure electrical feedthrough with a integral connector to interface with the client's hardware and provide the polarisation required for an insertable plug. The client wanted the new assembly to use the smallest possible military-grade standard connector and to be capable of withstanding significant levels of design and burst pressure.

## DESIGNED

We identified the most suitable connector form for the job and put together a concept design for the client's consideration. Once our concept was approved, Ultra provided Martec with detailed interface drawings to enable us to design and create the prototype connector assembly using advanced 3D CAD and CNC machining techniques.

## TESTED

- Extended high pressure
- Hermetic performance by helium leak
- Electrical
- Dimensional checks

## DELIVERED

<b>Material</b>	<b>Shell - Stainless Steel 316L</b> <b>Insert - Custom designed PEEK connector</b>
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<b>MIL-DTL-26482 Insert arrangement 8-4</b>
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<b>Pin count</b>	<b>4 Way</b>
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